# PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference BP110888   | FOR FURTHER ACTI  | ON S        | See Form F         | PCT/IPEA/416   |  |
|--|---|-------------|--------------------|--|--|
| International application No.  | International filing date (d  | lay/monti   | /year)             | Priority date (day/month/year)   |  |
| PCT/FI2005/050083  | 16-03-2005  |             |                    | 16-03-2004   |  |
| International Patent Classification (IPC) o  | r national classification and   | IPC         |                    |  |  |
| See Supplemental Box   |   |             |                    |  |  |
| Applicant  |   | · - · · · · |                    |  |  |
| Nokia Corporation et   | al  |             |                    |  |  |
|  |   |             |                    |  |  |
| This report is the international pre Authority under Article 35 and tre  |   |             |                    | is International Preliminary Examining 36.                                       |  |
| 2. This REPORT consists of a total of  | of 7 sheets,  | including   | g this cover       | r sheet.   |  |
| 3. This report is also accompanied by  | y ANNEXES, comprising:  |             |                    |  |  |
| a. (sent to the applicant  | and to the International Ru   | rom) s t    | otal of 3          | 3 sheets, as follows:  |  |
| sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the |   |             |                    |  |  |
|  | e Instructions).<br>supersede earlier sheets, bu  | t which t   | his Author         | rity considers contain an amendment that goes                                    |  |
| beyond the di<br>Supplemental  | sclosure in the international   | l applicat  | ion as file        | d, as indicated in item 4 of Box No. I and the                                   |  |
| b. (sent to the Internation  |   | -           |                    | number of electronic carrier(s))   |  |
| form only, as indicate   |   |             |                    | and/or tables related thereto, in electronic ace Listing (see Section 802 of the |  |
| Administrative Instru  |   | Keramik     | to sequen          | the Disting (see Section 802 of the  |  |
| 4. This report contains indications re   | elating to the following item   | ıs:         |                    |  |  |
| Box No. I Basis of   | f the report  |             |                    |  |  |
| Box No. II Priority  |   |             |                    |  |  |
| Box No. III Non-est  | tablishment of opinion with   | regard to   | novelty, i         | inventive step and industrial applicability                                      |  |
| Box No. IV Lack of   | unity of invention  |             |                    |  |  |
|  | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |             |                    |  |  |
| Box No. VI Certain documents cited   |   |             |                    |  |  |
| Box No. VII Certain defects in the international application   |   |             |                    |  |  |
| Box No. VIII Certain observations on the international application   |   |             |                    |  |  |
| Date of submission of the demand   |   |             | ompletion          | of this report   |  |
|  |   | 01 0        |                    |  |  |
| 12-12-2005   |   | 13-07-2006  |                    |  |  |
| Name and mailing address of the IPEA/SE  |   |             | Authorized officer |  |  |
| Patent- och registreringsverket<br>Box 5055  |   |             |                    |  |  |
|  |   |             | Ralf Bostrōm/MN    |  |  |
|  |   |             |                    | 5 8 782 25 00  |  |

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PCT/FI2005/050083

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Continuation of: Cover sheet

International patent classification (IPC)

**H04Q 7/32** (2006.01)

H04Q 7/22 (2006.01)

Form PCT/IPEA/409 (Supplemental Box) (April 2005)

International application No.

PCT/FI2005/050083

| Box | No. I   | Basis of the report  |  |  |  |
|-----|---|--|--|--|--|
| 1.  | With r  | regard to the language, this report is based on:   |  |  |  |
|     | $\boxtimes$   | the international application in the language in which it was filed  |  |  |  |
|     | a translation of the international application into which is the language of a translation furnished for the purposes of: |  |  |  |  |
|     |   | international search (Rules 12.3(a) and 23.1(b))   |  |  |  |
|     |   | publication of the international application (Rule 12.4(a))  |  |  |  |
|     |   | international preliminary examination (Rules 55.2(a) and/or 55.3(a))   |  |  |  |
| 2.  | furnisi   | regard to the <b>elements</b> of the international application, this report is based on (replacement sheets which have been<br>hed to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed"<br>re not annexed to this report): |  |  |  |
|     |   | the international application as originally filed/furnished  |  |  |  |
|     | $\bowtie$   | the description:   |  |  |  |
|     |   | pages 1-10 as originally filed/furnished   |  |  |  |
|     |   | pages* received by this Authority on   |  |  |  |
|     | <b>~</b>  | pages* received by this Authority on   |  |  |  |
|     | $\bowtie$   | the claims:  |  |  |  |
|     |   | pages as originally filed/furnished  |  |  |  |
|     |   | pages* as amended (together with any statement) under Article 19   |  |  |  |
|     |   | pages* 11-13 received by this Authority on 12.12.2005  |  |  |  |
|     | <b>K</b>  | pages* received by this Authority on   |  |  |  |
|     | $\boxtimes$   | the drawings:  |  |  |  |
|     |   | pages 1-2 as originally filed/furnished  |  |  |  |
|     |   | pages* received by this Authority on   |  |  |  |
|     |   | pages* received by this Authority on   |  |  |  |
|     | Ш   | a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.  |  |  |  |
| 3.  |   | The amendments have resulted in the cancellation of:   |  |  |  |
|     |   | the description, pages   |  |  |  |
|     |   | the claims, Nos.   |  |  |  |
|     |   | the drawings, sheets/figs  |  |  |  |
|     |   | the sequence listing (specify):  |  |  |  |
|     |   | any table(s) related to the sequence listing (specify):  |  |  |  |
| 4.  |   | This report has been established as if (some of) the amendments annexed to this report and listed below had not beer made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).  |  |  |  |
|     |   | the description, pages   |  |  |  |
|     |   | the claims, Nos.   |  |  |  |
|     |   | the drawings, sheets/figs  |  |  |  |
|     |   |  |  |  |  |
|     |   | the sequence listing (specify):  any table(s) related to the sequence listing (specify):   |  |  |  |
|     | T.C.  |  |  |  |  |
|     |   | 4 applies, some or all of those sheets may be marked "superseded."   |  |  |  |

International application No.

PCT/F12005/050083

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

| Statemen |   |
|----------|---|
| Sistemen | н |

| Novelty (N)                   | Claims<br>Claims | 1-18 | YES NO |
|-------------------------------|------------------|------|--------|
| Inventive step (IS)           | Claims<br>Claims | 1-18 | YES NO |
| Industrial applicability (IA) | Claims<br>Claims | 1-18 | YES NO |

#### 2. Citations and explanations (Rule 70.7)

The present application is concerned with a problem in mobile networks that if the size of a multimedia message is too large it can not be transmitted in the network and the originating user gets an error message.

Documents cited in the International Search Report:

- D1. WO 03088690 A1
- D2. US 5822700 A1
- D3. US 2003081557 A1

#### Additional document:

D4. Nokia: "Nokia 3300 User Guide", 2003.

D1, which is considered to represent the most relevant state of the art, discloses a method for adding advertisements to text messages (SMS) and multimedia messages (MMS). The messages in D1 are not allowed to have a size larger then a certain value, Max\_Message\_size, which value is determined by the network. This means that the size of the original message, Message\_size, cannot exceed the value of Max\_Message\_size-Slogan\_size (see page 7, line 6-19). The maximum size of the messages is communicated to the users (see page 6, line 31 - page 7, line 5).

D2 and D3 are background art documents and are not considered to be of particular relevance.

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#### Supplemental Box

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D4 is a user guide for the nokia mobile phone 3300. The pages 52-82 in D4 describe the messaging functionality. It is stated on page 53 that before a message is sent, the device tells you if the message exceeds the maximum length allowed for a message.

Claims 1, 10 and 17:

The MMS in D1 corresponds to the multimedia message in the application. The parameter Max\_Message\_size in D1 corresponds to the size limit in the application. The invention according to claims 1, 10 and 17 differs from D1 in that the size limit is available for the application and that the application indicates the size limit to the user. This feature is not explicitly described in D1.

The remaining problem (the objective problem) to be solved with the background of D1 is that the user cannot be certain whether or not an original message will be truncated (unless he counts the number of characters in the message).

It is well known to inform a user if a message exceeds a maximum length/size. This is for example shown by D4 (see page 53). It is obvious to the skilled person to use a solution for SMS messages (D4) to solve the above state problem since SMS messaging and multimedia messaging (MMS) belongs to the same technical field.

Therefore it is obvious to a skilled person to solve the above stated problem by designing the message application in D1 so that the user is informed before the message is transmitted if the message exceeds the size limit. The skilled person would thereby arrive at an implementation which produces "before an attempt for transmission of the multimedia message in said network is done an indication to a user of the device as a response to a situation in which a size of the multimedia message exceeds said multimedia size limit". Consequently, the skilled person would arrive at the claimed invention and the invention according to claims 1, 10 and 17 is thus considered to lack an inventive step.

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#### Supplemental Box

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Claims 2, 11 and 18:

These claims state that the size limit is received from the network. This is also the case in D1. Thus, the invention according to claims 2, 11 and 18 is considered to lack an inventive step.

#### Claim 4:

This claim states that the device is provided with a multimedia message application. The device in D1 obviously contains an application for creating multimedia messages (MMS). Hence, the application according to claim 4 is considered to lack an inventive step.

Claims 8 and 9:

These claims state that the device is a mobile device. This is also the case in D1. Hence, the invention according to claims 8 and 9 is considered to lack an inventive step.

Claims 3, 5-7 and 12-16:

The invention as defined in these claims differs from D1 in obvious details concerning a method for composing a message according to claims 1, 10 and 17.

More specifically, the additional features described in these claims are either known from prior art documents or generally known in the technical field of data communications.

The inclusion of such features is regarded as part of the customary praxis the skilled person would consider in accordance with circumstances.

From that described in these claims it is considered obvious to a person skilled in the art, with knowledge of D1, to accomplish what is described in these claims, if confronted with these problems. Hence, the invention claimed in claims 3, 5-7 and 12-16 is not considered to involve an inventive step.

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According to the arguments stated above, the invention claimed in claims 1-18 is considered to be novel and to be industrially applicable, but claims 1-18 is considered to lack an inventive step.

Form PCT/IPEA/409 (Supplemental Box) (April 2005)

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#### Claims

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- 1. A device for composing a multimedia message for which a network defines a given multimedia message size limit for enabling transmission of the multimedia message in said network, **characterized** in that the device includes an application program for creating the multimedia message, and that in the device, there is registered said multimedia message size limit defined by the network, so that said multimedia message size limit is available for the application program, and that the device includes means for producing before an attempt for transmission of the multimedia message in said network is done an indication to a user of the device as a response to a situation in which a size of the multimedia message exceeds said multimedia message size limit.
- 2. A device according to claim 1, **characterized** in that the device includes means for inquiring and/or receiving the multimedia message size limit from the network.
- 3. A device according to claim 2, characterized in that the device includes means for inquiring and/or receiving the multimedia message size limit from at least one of the following: a messaging server, a home register or a server located on the network bus.
- A device according to claims 1 3, characterized in that the device is
   provided with at least one of the following: a memory unit, an application program, a multimedia message application or a system file, for recording the multimedia message size limit.
  - 5. A device according to claims 1-4, characterized in that the device includes means for inquiring and/or receiving the multimedia message size limit from the network as a response to switching the device on.
  - 6. A device according to claims 1-5, characterized in that the device includes means for inquiring and/or receiving the multimedia message size limit from the network as a response to an observation that the device has entered the coverage area of a given network or messaging server.
- 30 7. A device according to claims 1 6, characterized in that the device includes means for comparing the multimedia message size limit with the size of a multimedia message composed by the application program, and for indicating the



detected size difference in the application program either visually and/or by means of sound.

- 8. A device according to claims 1-7, characterized in that the device is the user's mobile device.
- 5 9. A device according to claims 1 8, **characterized** in that the device is a mobile station.
  - 10. A method for composing a multimedia message for which a network defines a given multimedia message size limit for enabling transmission of the multimedia message in said network, **characterized** in that
- the multimedia message is created by means of an application program,
  - the multimedia message size limit defined by the network is made available for the application program,
  - the application program looks up the information concerning the multimedia message size limit, and
- as a response to a situation in which a size of the multimedia message exceeds the multimedia message size limit the application program produces an indication to a user of the method before an attempt for transmission of the multimedia message in said network is done.
- 11. A method according to claim 10, characterized in that the multimedia message size limit defined by the network is inquired and/or received from the network.
  - 12. A method according to claim 11, **characterized** in that the multimedia message size limit defined by the network is inquired and/or received from one of the following: a messaging server, a home register or a server located on the network bus.
  - 13. A method according to claims 10 12, **characterized** in that the multimedia message size limit is registered in one of the following: a memory unit, an application program, a multimedia message application or a system file.
- 14. A method according to claims 10 13, **characterized** in that the multimedia message size limit defined by the network is inquired and/or received from the

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network always when switching on a device that is capable of processing multimedia messages.

15. A method according to claims 10 - 14, characterized in that the multimedia message size limit defined by the network is inquired and/or received from the network always when a device that is capable of processing multimedia messages enters the coverage area of a new network or network switching center.

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- 16. A method according to claims 10 15, **characterized** in that the multimedia message size limit defined by the network is compared with the real size of the multimedia message composed by the application program, and when the multimedia message is equally large or larger than the defined multimedia message size limit, the situation is indicated in the application program either visually and/or by sound.
- 17. A software for composing a multimedia message for which a network defines a given multimedia message size limit for enabling transmission of the multimedia message in said network, **characterized** in that the software includes software means for obtaining the multimedia message size limit defined by the network for the multimedia message, software means for comparing a size of the multimedia message with the multimedia message size limit, and software means for producing before an attempt for transmission of the multimedia message in said network is done an indication to a user of the software as a response to a situation in which the size of the multimedia message exceeds the multimedia message size limit.
- 18. A software according to claim 17, **characterized** in that the software includes software means for requesting and/or receiving from the network the multimedia message size limit defined by the network for the multimedia message.